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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,524	09/25/2001	Alfred Hagemeyer	RUH-284	9609
20311	7590	07/14/2004	EXAMINER	
MUSERLIAN AND LUCAS AND MERCANTI, LLP 475 PARK AVENUE SOUTH NEW YORK, NY 10016			COOKE, COLLEEN P	
			ART UNIT	PAPER NUMBER

1754

DATE MAILED: 07/14/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action**

Application No.

09/937,524

Applicant(s)

HAGEMEYER ET AL.

Examiner

Colleen P Cooke

Art Unit

1754

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 24 June 2004 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE. Therefore, further action by the applicant is required to avoid abandonment of this application. A proper reply to a final rejection under 37 CFR 1.113 may only be either: (1) a timely filed amendment which places the application in condition for allowance; (2) a timely filed Notice of Appeal (with appeal fee); or (3) a timely filed Request for Continued Examination (RCE) in compliance with 37 CFR 1.114.

**PERIOD FOR REPLY** [check either a) or b)]

- a) ☐ The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.
- b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection. ONLY CHECK THIS BOX WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

1. ☐ A Notice of Appeal was filed on \_\_\_\_\_. Appellant's Brief must be filed within the period set forth in 37 CFR 1.192(a), or any extension thereof (37 CFR 1.191(d)), to avoid dismissal of the appeal.
2. ☒ The proposed amendment(s) will not be entered because:
- (a) ☒ they raise new issues that would require further consideration and/or search (see NOTE below);
- (b) ☐ they raise the issue of new matter (see Note below);
- (c) ☐ they are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
- (d) ☐ they present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: see attached office action.

3. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.
4. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
5. ☐ The a) ☐ affidavit, b) ☐ exhibit, or c) ☐ request for reconsideration has been considered but does NOT place the application in condition for allowance because: \_\_\_\_\_.
6. ☐ The affidavit or exhibit will NOT be considered because it is not directed SOLELY to issues which were newly raised by the Examiner in the final rejection.
7. ☒ For purposes of Appeal, the proposed amendment(s) a) ☒ will not be entered or b) ☐ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: 8-10, 12 and 13.

Claim(s) rejected: 1-3, 5-10, 12-14 and 16.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

8. ☐ The drawing correction filed on \_\_\_\_\_ is a) ☐ approved or b) ☐ disapproved by the Examiner.
9. ☐ Note the attached Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_.
10. ☐ Other: \_\_\_\_\_

***Status of After Final Amendment***

The after-final amendment filed 6/24/04 will not be entered because it raises new issues which would require further consideration. The addition of the claim language “the steps consisting essentially of” requires the examiner to newly consider which steps are included and excluded by this new claim language. This new language would also require further consideration as to what steps may or may not affect the basic and novel characteristics of a composition. Because the amendment raises these new issues that would require further consideration, the amendment will not be entered.

***Response to Arguments***

Applicant's arguments filed 6/24/04 have been fully considered inasmuch as they apply to the final rejection made without entry of the amendment after final.

Applicant's arguments see page 7 first (partial) paragraph, filed 6/24/04, with respect to the objection to claims 1 and 5-7 have been fully considered and are persuasive. The objection of claims 1 and 5-7 has been withdrawn.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Bankmann et al. teaches that the titania supports produced by flame

Art Unit: 1754

hydrolysis have a high surface area which is desirable to provide high catalytic activity (page 226, "Raw Materials" section, first three paragraphs) which high catalytic activity is desirable for catalysts in most any application.

In response to applicant's argument that Bankmann et al. is nonanalogous art to Couves et al., it has been held that a prior art reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the applicant was concerned, in order to be relied upon as a basis for rejection of the claimed invention. See *In re Oetiker*, 977 F.2d 1443, 24 USPQ2d 1443 (Fed. Cir. 1992). In this case, Bankmann et al. teaches an improved catalyst support, which has high catalytic activity; this property is not process-specific and therefore it is analogous art. In addition, as the applicant's field of endeavor is a catalyst with superior performance, Bankmann et al. would be reasonably pertinent as it concerns an improved catalyst support.

In response to the applicant's argument that Bankmann et al. does not overcome deficiencies of the primary reference as it does not disclose the presence of gold and palladium, it is submitted that Bankmann et al. is not relied upon in the rejection made to supply any such teachings. Couves et al. teaches the catalyst as claimed but for the particular support claimed and Bankmann et al. is relied upon to provide a teaching of the support claimed as explained in the rejection made.

Lastly, the applicant argues the declaration "clearly demonstrates that the catalysts of claim 1 are different from the those of the catalyst obtained by Couves et al." The applicant provides no new data or declaration and therefore the declaration is still found to not be commensurate in scope with the claims and does not adequately compare the present invention to

Art Unit: 1754

the cited prior art. The applicant has merely compared one example of the invention with one example from the prior art.

### ***Claim Objections***

Claims 8-10 and 12-13 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Claim 8, from which the other claims depend, limits the temperature range for reduction to 300-600°C. Claim 8 depends from claim 1 which has already limited this range to 300-500°C. Therefore claim 1 does not allow for the additional temperatures included in the range of claim 8 and thus claim 8 fails to further limit claim 1.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5-10, 12-14, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Couves et al. (EP 0839793 A1), in view of Bankmann et al. ("Forming of High Surface Area TiO<sub>2</sub> to Catalyst Supports", pp. 225-242).

Art Unit: 1754

Regarding claims 1 and 8, Couves et al. teaches a catalyst is made by impregnating a palladium compound onto a support (page 2, lines 28-29), where the support may be porous titania (page 3, lines 10-11), reducing at elevated temperatures of 100-500 °C until the material is reduced (page 4, lines 13-14), and applying an alkali metal compound (page 3, lines 38-41), which is taught as being done at any suitable stage of preparation. Couves et al. does not specifically teach that the titania support is produced by flame hydrolysis of  $\text{TiCl}_4$ .

Bankmann et al. teaches catalyst support materials and specifically teaches that titania supports produced by flame hydrolysis of  $\text{TiCl}_4$  are known in the art and known to be used as catalyst supports.

It would have been obvious to modify the catalyst of Couves et al. by using a titania support produced by flame hydrolysis because Couves et al. teaches that many known catalyst supports having varying properties are suitable, the material being chosen to have properties specifically tailored to the particular application (page 3, lines 10-18) and Bankmann et al. teaches that the titania supports produced by flame hydrolysis have a high surface area which is desirable to provide high catalytic activity (page 226, "Raw Materials" section, first three paragraphs).

Regarding claims 2 and 9, Couves et al. teaches that generally potassium is present (page 3, line 41).

Regarding claims 3 and 10, Couves et al. teaches that a gold compound may additionally be used (page 3, lines 32-34).

Regarding claims 5 and 12, Couves et al. teaches the catalyst and method of preparing as described with respect to claims 1 and 8 above. Although Couves et al. does not specifically

Art Unit: 1754

teach a duration of the reduction, Couves et al. does teach that the reduction takes place “until the material is reduced” (page 4, lines 13-14). It would have been obvious to one of ordinary skill in the art at the time the invention was made to perform the reduction for a specified amount of time, since it has been held that discovering an optimum value or a result effective variable involved only routine skill in the art. In re Boesch, 617 F.2<sup>nd</sup> 272, 205 USPQ 215 (CCPA 1980). The artisan would have been motivated to perform the reduction for the duration specified by the reasoned explanation that the art teaching reduction is performed until a certain condition is reached.

Regarding claims 6-7 and 13-14, Couves et al. teaches that the reduction may be carried out with gases such as carbon monoxide, hydrogen and ethylene, which may be mixed with inert gases (page 4, lines 11-13).

Regarding claim 16, Couves et al. teaches that an ethylene, acetic acid, and oxygen containing gas may be contact with the supported palladium catalyst described to produce vinyl acetate (page 4, lines 19-23).

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period

Art Unit: 1754

will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Colleen P Cooke whose telephone number is 571-272-1170. She can normally be reached Mon.-Thurs. 7am-5:30pm.

If attempts to reach the examiner by telephone are unsuccessful, her supervisor, Stan Silverman can be reached at 571-272-1358. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Colleen P. Cooke 7/7/04*

Colleen P Cooke  
Examiner  
Art Unit 1754

  
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